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THE CORE OF THE RAILROAD PROBLEM

BY LOGAN G. MCPHERSON

New York City

It was President Hollander's desire that this discussion be specific in its treatment of the present realities of the railroad problem. There are phases of the railroad problem which come and go so rapidly that it is difficult even for the press to keep abreast of them. In recent months such phases have been the relinquishment of the operation of the railroads by the government, the governmental guarantee succeeding the relinquishment, the funding of the railroad indebtedness, the proposal that the government sell securities to obtain funds for transfer to the railroads, the car shortage, the increase in wages, the increase in rates, the reduction in rates, the reduction in wages coincident with the threat of a nation-wide strike. These passing phases are as the waves to which the winds and the currents give rise. The winds and the currents are the realities all of the time and therefore the realities of the present at any time that may be present.

Among the definitions of "reality" in the Oxford dictionary is this: "Real existence,—that which underlies and is the truth of appearance or phenomena—That which constitutes the actual thing as distinguished from what is merely apparent or external."

In accordance with this definition the underlying reality of the railroad problem is in the fact that the ultimate purpose of the railroads is to serve, protect, and promote the industry and commerce of the United States, and thus to conduce to the material welfare of the people of the United States. The degree in which this purpose is served largely depends upon the adjustment between the current of the receipts and the current of the expenditure of the railroads which are ever played upon by the winds arising from the varying interrelations between the supply of and demand for all that the railroads transport. There ought to be the adjustment, leading in the greatest attainable degree to the continuous fulfillment of this ultimate purpose, between that which is received by the railroads from the sale of transportation and that which they pay for its provision. This includes that adjustment which will enable the necessary extension of their facilities to meet the requirements of an increasing industry and commerce. And there ought to be established the conditions

which give incentive to the utmost efficiency in the utilization of all which is applied in providing transportation. That is the railroad problem.

The predicament in which the railroads have been for many years is due to the lack of such adjustment, and to the fact that their efficiency has been impaired by conditions they are struggling to overcome. The principal causes which have acted during the past twenty years to bring about this predicament are found in a long series of contentions, which in the main were settled not in recognition of the principles which must be observed if the ultimate purpose of the railroads is to be upheld, but to quiet popular clamor instigated by those who sought to promote their own interests to the neglect of the protection of the railroads.

An extending belief that the railroads, instead of being everlastingly censured and harassed, ought to be placed under conditions which will enable them to serve their purpose, led to the enactment of the Transportation Act of 1920. This act recognizes the necessity for the railroads to have a net operating income, a surplus of receipts over expenditures. In this respect it is a distinct advance over previous railroad legislation. It stipulates that the annual net railway operating income, as nearly as may be, shall be a fair return upon the fair value of the railway property. It provides that for the two years beginning March 1, 1920, such fair return should be equal to five and one-half per centum of such fair value, but that the Interstate Commerce Commission might at its discretion add thereto a sum not exceeding one-half of one per centum of such fair value. At the expiration of the two years the Commission is authorized to determine from time to time the percentage which will constitute a fair return. It evidently is the intent of the Transportation Act that the service of the railroads is to be provided by receipts from the sale of transportation, not in any degree by taxation.

If the railroads are maintained by the receipts derived from the sale of transportation, the cost of providing the service tends to be diffused among the people in proportion to the benefits they derive, the cost of transportation is included in the prices paid for all which they use and consume. If the railroads are maintained by taxation the cost tends to be diffused in disproportion. To the extent that deficits are paid from taxation they tend to be diffused in disproportion.

During these two years the net railway operating income has

not equalled the specified five and one-half per centum. In 1920 the railroads had the greatest traffic and the greatest gross revenue from the sale of transportation in their history. Their operating expenses were also the greatest in their history, so high that their net operating income was equivalent to only one-tenth of one per cent of their property investment. This was notwithstanding that in 1920 the railroads produced 21 per cent more revenue ton miles with approximately 2 per cent increase in freight train miles, and 39 per cent more passenger miles with fewer train miles than in 1916, the year before the operation of the railroads was taken over by the government. For 1916 the net operating income was equivalent to a fraction less than 6 per cent on the property investment.

These two years have been a period of readjustment attended with abnormal conditions which the nations are endeavoring to remove in order that the normal processes of industry and commerce may be restored. The two years expire March 1, 1922. Then under the Transportation Act it will be the duty of the Commission to determine the percentage of the aggregate value of the property of the carriers which will constitute a fair return, and so to adjust rates that their net railway operating income shall at least be equal to such percentage. That is, on the first of the coming March the Interstate Commerce Commission is to determine what shall be a fair reward to the railroads for providing the service of transportation and to adjust railroad rates in order that they may receive that reward. This determination of the Commission will involve, not the disposition of earnings received but an estimate of the future. If the estimate is not verified and the net operating income falls short of the percentage, there is no way in which the railroads can recuperate the loss. This is a reality of the transportation problem of first and foremost importance.

The Commission is directed to determine the fair value of the property of a carrier and of the carriers under the provisions of the Valuation Act signed by the President March 1, 1913, which is incorporated in the Interstate Commerce Law as Section 19-a. It does not need to be pointed out to a body of economists that the value of a thing is not what it costs but what can be obtained for it at the time of sale; that the value of that utilized by an organization engaged in production is not determined by its cost but by the return derived from the sale of utilities produced by

means of the utilization. Value is the price obtained at time of sale or the price which could be obtained in case of sale. Prices in the normal course of industry and commerce are determined by interrelations between supply and demand. The value of a business organization to its customers is determined by the things and services they buy from it, that is, by its serviceability to them, and this is indicated by the prices they pay. Its value to its employees is determined by what they receive for what they sell to it, that is, by the wages, the prices paid to them for the effort they exert in its behalf. Its value to those from whom it buys materials and supplies is determined by what they receive for what they sell, that is, by the prices paid for them. Its value to its bondholders depends upon what they receive for what they sell, that is, upon the interest, the price paid for the use of capital provided by them. Its value to its stockholders depends upon what they receive for the proprietary investment made by them. This is profit in the form of net income whether paid to them in dividends or retained as surplus. The degree of value to the stockholder depends upon the degree in which the total expenses of production are kept below the total receipts from the sale of that produced.

To determine the valuation of a railroad company is not to arrive at the cost of its physical assets or the price at which those physical assets could be replaced. The cost of such assets may have been greater or less at one time than at another; it may cost more or less to replace them at one time than at another. A railroad company is seldom sold and bought in its entirety, but its value is reflected in the value of its stocks and bonds; that is, in the prices they will bring at the time of sale. This valuation in actual practice is the result of the judgment of all effective buyers and sellers as to the benefits they believe may be derived from selling them or buying them. These prices are indicated by the market quotations which vary from time to time, even from day to day, as these judgments vary. These various judgments of buyers and sellers are determined mainly by the net earnings of a corporation and by the estimates of the probability of their continuance, of their increase or decrease. Therefore, as value is determined by what is received or what can be received and not by what has been paid, the sense in which the terms "value" and "valuation" are used in the Valuation Act and in all of the discussion and procedure to which that Act has given rise, is in

the sense of placing the cart before the horse. After much discussion and experiment the procedure under the Valuation Act was devoted virtually entirely to the endeavor to ascertain the cost of reproduction new, or the cost of reproduction less depreciation, of the property, that is, of the physical assets of a carrier. The Commission has allowed an addition of seven and one-half per centum to this cost for appreciation due to the coördination of the physical assets and the serviceability of a railroad company as a going concern. The total thus ascertained has been designated the value of a railroad company.

As the physical assets of a railroad company are indispensable to the performance of its service, it follows as a matter of course that those who provide the capital necessary to their acquirement must receive adequate reward for the utilization of that capital; and it follows that the railroads must offer adequate reward for the additional capital requisite to the extension of their facilities for the increased provision of transportation. For the latter purpose the Transportation Act authorizes the Commission in its discretion to allow a carrier a sum not exceeding one-half of one per centum of the fair value of its property in addition to the fair return accorded as the reward for the use of the property.

The percentage to be allowed as a reward for the use of capital and as provision for the extension of facilities constitutes the net railway operating income of a railroad company. This is the proportion of the receipts derived from the sale of transportation which remains after the current expenses, the running expenses for providing transportation, have been met. These running expenses include wages and salaries and the cost of materials and supplies. Those who pay for the service of transportation must pay a total constituted of expenses incurred for wages and salaries, for materials and supplies, for repairs to and renewal of physical assets, and sufficient in addition to yield the specified net railway operating income.

Although it presumably is the intent of the Transportation Act that the railroads shall to the utmost attainable degree serve, protect, and promote the commerce of the United States, and there are certain provisions which evidently are intended to have that effect, nowhere in the Transportation Act nor in the Interstate Commerce Law as a whole is that purpose specifically stated. Reference to railroad rates is made in such terms as fair, just, and reasonable; and it is held that there ought to be honest,

efficient, and economical management. Nowhere is there a criterion of the fairness, justness, and reasonableness of a rate nor of efficiency and economy of management.

For many years it was the tendency of legislatures and commissions to compel the railroads to charge rates which would allow the greatest number of competing producers and shippers to compete. This tended to subvert the justification for competition itself, and to reduce that which the railroads received in relation to the service performed. When railroad rates are so adjusted that the less efficient producers of utilities of any kind are enabled to continue to supply part of the demand which otherwise would be supplied at prices as low by more efficient producers, there is utilized in their production the effort of a greater number of persons than is necessary and of a greater proportion of capital than is requisite. The burden falls in large measure upon the railroads. They are compelled to do more work than they ought to do. This means an unnecessary employment of capital and of effort by the railroads, and they receive less than they ought to receive for the work they do. This has conspicuously been the case in the bituminous coal industry, which provides a large proportion of the traffic of the railroads. It has been easy to open a bituminous coal mine in this country. New operators have demanded an allotment of the cars supplied by the railroad companies. Railroad commissions have compelled compliance with their requests notwithstanding that existing mines were more than adequate to supply the demand. The result has been loss, waste, lack of continuous employment, and continual disturbance in the industry. It is authoritatively and conservatively estimated that the mechanical capacity of the bituminous coal mines in this country is at least 75 per cent greater than requisite to supply the demand, that the working capacity including the effort of the miners and other employees is at least 50 per cent greater than requisite to supply the demand.

For many years it was the tendency of legislatures, commissions, and boards to compel the railroads to increase the wages of their employees and to increase the number of their employees beyond that requisite for the efficient performance of the service. This tended to increase the costs of performing the service in relation to the service performed. Ground between the upper and the nether millstones, the revenue of the railroads became inadequate. The difficulty was enhanced under the governmental

control of the railroads during the war. Wages were advanced time and again, the working conditions of employees were made easier and the number of employees was multiplied. Commensurate advances were not made in rates, the governmental authorities preferring to pay the deficits from taxation.

The Transportation Act without specifying a definite criterion for expenses endeavors to provide adequate revenue for the railroads through that adjustment of rates which will enable them to pay their running expenses and to obtain a specified net railway operating income. That this is putting the cart before the horse is demonstrated by the effect of the increased rates accorded after the Transportation Act was enacted. Not only did the increased rates not yield to the railroads the specified net railway operating income, but their tendency was to retard instead of to promote the industry and commerce of the country.

It happened that just as the preparation of this paper reached this point the Interstate Commerce Commission, in an order making a radical reduction in the rates on hay and grain, declared in effect that railroad rates should be so adjusted as best to serve industry and commerce, and that it was the duty of the railroads from the receipts derived from the sale of transportation at such rates to provide their service and to provide the facilities for increasing their service. This is putting the horse before the cart where it belongs. The first and foremost reality of the transportation problem is the need to keep the horse and cart moving under the conditions which best serve the industry and commerce of the United States and therefore best serve the material welfare of the people of the United States. When the horse and cart are thus kept moving the railroads will have emerged from their predicament, the transportation problem will have been solved.

To this end there must be the application of certain elementary principles of economics. It might seem superfluous or worse to indulge in the expression of such principles before a body of professional economists were it not that their application has been woefully neglected and that the principles themselves are not generally understood. Moreover, when important conclusions are drawn the premises ought to be clearly stated. Economic theory ought to embody economic principles of practical application; otherwise it is useless. The justification of the economist is in the ascertainment and elucidation of such principles. Through long

practical experience there was painfully borne in upon me in all of the disputes concerning the railroads not only the absence of recognition of underlying principles, but the absence of such principles themselves.

The following fundamental propositions are advanced as truisms. They are advanced in the hope that they are given that coördinated and synthetized expression which adapts them for practical application in the economic activity which is interwoven throughout all production, buying, and selling.

The processes of producing the utilities which individuals use and consume, the utilities in the forms of matter requisite to the maintenance of human existence, to the manifestation of human activity in whatever field, are effected at this time in the main by organizations of employer and employees. They apply productive force in unending ramification in the successive processes of producing substance, of transforming it into the utilities we use and consume, and into the instruments of production utilized in that transformation. Throughout all of the stages and processes in which there is the ramification of productive force there is the ramification of the service of the railroads due to the productive force applied by them. The charges paid for the service of transportation enter into the costs of production at every stage and process from which emerge the final utilities which all persons use and consume. The final buyers of final utilities for the use and consumption of the entire population thus pay for all of the costs of their production, including the costs of transportation. The service of the railroads is of a piece with the service of all industry and commerce.

In all of the stages and processes of production are utilized land, instruments of production, and human effort. The utilization of these factors constitutes the application of productive force. There cannot be more of utilities used and consumed by the entire population than emerge from the processes of production. The greater the volume of utilities of any kind and quality produced in relation to the productive force applied, the greater the number of persons whose wants for utilities of that kind can be met. The greater the volume of utilities of any kind produced in relation to the productive force applied, the more there will be of productive force available for the production of utilities of other kinds. Therefore, the greater the volumes in which utilities of the various kinds are produced in due relation

to the demand, and in relation to the productive force applied, the greater will be the volumes and the varieties of utilities to meet the wants of the entire population.

The lower the cost at which utilities are produced, the lower the prices at which they can be sold. The fewer the dollars expended in production, the greater the measures of utilities that dollars will buy. As the volumes and varieties of utilities produced increase in relation to the entire population, they increase in relation to the number of those applying effort in their production. Competition between employers for the sale of the larger volumes of utilities produced compels them to sell at prices that extend their sales. As production thus increases and extends, competition between employers for the effort requisite to continued production compels the payment of wages which enable employees to extend their purchases. The fewer the dollars expended in production and the greater the volumes and varieties of utilities produced, the greater the measures of utilities that can be bought with the dollars all persons receive.

If more is paid for any factor utilized in production than the price at which that factor could be obtained under conditions which promote its wholesome preservation and efficient utilization, the costs of production have been unduly increased. Moreover, if higher wages are paid to employees engaged in any process of production, buying and selling, including the provision of transportation, than those at which employees of equal serviceability could be secured, the latter will be deprived of the opportunity for which they are capable, and may be obliged to take other employment at still lower wages. If the prices of utilities of various kinds are unduly increased by the payment of such unduly high wages, all of those who buy such utilities, including the employees engaged in their production, will have to pay higher prices for them. Unduly high costs of production may mean that unduly high prices will have to be paid or that the profit of producers will be unduly diminished, or both.

It is the attainment of profit which enables the acquisition of increasing areas of land, the provision of instruments of production increasing in number and capacity by means of which production of all kinds is in vastly greater volume than otherwise would be possible, the production of increasing volumes of substance, its transformation into increasing volumes of utilities, and the payment of wages and salaries to an increasing number of employees.

Thus it is by means of profit that the increasing wants of an increasing population are met, and wages are paid to the increasing number who must apply their efforts in the increasing production. Moreover, it is the attainment of profit from the sale of utilities produced which enables the production of utilities of other kinds which have not previously been produced, which enables an increase not only in the volumes but also in the varieties of utilities.

The principles that the volumes in which utilities are produced should be in due proportion and in due relation, that in such proportion and relation they should be produced in the greatest practicable volumes in relation to the force applied under the conditions which promote the wholesome preservation of every factor constituting that productive force, that with due regard to these conditions no higher price be paid for any factor utilized than the price at which that factor could be obtained under fair competition, and that there be increasing production to meet increasing wants, are applicable toward the solution of virtually every problem that besets industry and commerce today. Their application with exactitude may be exceedingly difficult, but their universal recognition would tend toward their application in the fullest attainable degree. They are applicable in the working of the railroads and in the inter-working of the railroads with all of the stages and processes of production, buying, and selling. That is, there must not only be the relation between that which is paid to the railroads and that which is paid by the railroads which will conduce to the observance of these principles, but there also must be the relation between the receipts and expenditures of the railroads and the receipts and expenditures of all other business organizations which will so conduce. The degree in which the administration and management of a railroad conduces to this observance is the criterion of economy and efficiency in operation. The degree in which a railroad rate conduces to this observance is the criterion of the justness, fairness, and reasonableness of a railroad rate.

One fact is of preëminent importance. It is not alone the physical assets which conduce to the serviceability of a railroad company. Of equal if not greater importance is the efficiency with which these assets are utilized. For example, if the movement of cars and locomotives in the conveyance of freight be doubled, double the volume of transportation is provided with the same volume of physical assets. If the reward of the railroads

be restricted to a specified percentage of the so-called value of the physical assets, there will be the temptation to invest additional capital in the augmentation of physical assets instead of the incentive to make the most efficient utilization of the physical assets in which capital has been invested.

The overwhelming importance of the transportation service to all of the people of the United States is alone sufficient justification for its regulation by the government. Regulation in one sense means to preserve order; in another sense it means to manage. The government of this country has come more and more to take a greater share in the administration and management of the railroads instead of confining its regulation to bringing to light, punishing, and preventing the repetition of evils and abuses in their administration. It has appointed board after board, commission after commission, according them authority which has impaired the authority of those charged with the administration of the railroads for the results of whose operations they are responsible. The railroad legislation of this country has compelled the railroads to do many things which they ought to have done themselves, and it has enabled them to do many things which they struggled in vain against popular antagonism in order to do themselves. At the same time it has advanced in that bureaucratic control which impairs efficiency and retards progress.

The Transportation Act has been designated as a bill providing for the return of the railroads to private ownership. In truth, it subjects the railroads to a greater degree of governmental control than ever before. The Interstate Commerce Commission is vested with virtually absolute power to fix the rates upon which the earnings of the railroads depend; a railroad labor board has been given a high degree of authority in the adjustment of wages, which are the principal item in the expenses of the railroads. The Commission has been given authority over the issue of securities and the return that shall be received upon capital invested in those securities. It has been given authority over the extension and construction of new lines. It obliges railroads which have earned more than a stipulated return to pay a portion of the surplus to the government from which the Commission may make loans to other railroads, and thus to an extent the Commission becomes a banker for the railroads. All of this authority has

been vested in a body of eleven men with headquarters in Washington.

There have been many evils and abuses in railroad administration and management, but when those charged with their administration and their management had initiative and incentive the railroads of the United States admittedly were the best and their rates the lowest of those of any nation, and the traffic increased by leaps and bounds. There have been seeming evils and abuses that were no more than the growing pains of progress. Governmental administration of business activity nearly always tends to the level of mediocrity or worse. In that the Transportation Act brings more of government into the business of the railroads, it contravenes the slogan of the present national administration that there should be more of business in government and less of government in business.

The railroads are under obligation so to perform the service of transportation that it will conduce in the greatest degree to the general welfare. It follows that the people are under obligation to promote the conditions under which that service may be so performed. Such expressions as "The railroads and the people" and "The railroads and the public" ought to be taboo. The railroads are "of the people, by the people, for the people."